

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

Date of mailing (day/month/year)

05 December 2000 (05.12.00)

Applicant's or agent's file reference

P 1999 01378 WO

International application No.

PCT/DK00/00121

From the INTERNATIONAL BUREAU

To:

HOFMAN-BANG A/S
Aaboulevarden 17
P.O. Box 5020
DK-8100 Aarhus C
DANEMARK

IMPORTANT NOTIFICATION

International filing date (day/month/year)

17 March 2000 (17.03.00)

1. The following indications appeared on record concerning:

 the applicant the inventor the agent the common representative

Name and Address

HOFMAN-BANG A/S
Ryesgade 3
P.O. Box 5020
DK-8100 Aarhus C.
Denmark

State of Nationality

State of Residence

Telephone No.

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Facsimile No.

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Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

 the person the name the address the nationality the residence

Name and Address

HOFMAN-BANG A/S
Aaboulevarden 17
P.O. Box 5020
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Denmark

State of Nationality

State of Residence

Telephone No.

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Facsimile No.

45 86 20 22 10

Teleprinter No.

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input checked="" type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input type="checkbox"/> the elected Offices concerned
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

C. Cupello

Facsimile No.: (41-22) 740.14.36

Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)Date of mailing (day/month/year)
16 November 2000 (16.11.00)To:

HOFMAN-BANG A/S
Ryesgade 3
P.O. Box 5020
DK-8100 Aarhus C.
DANEMARKApplicant's or agent's file reference
P 1999 01378 WO

IMPORTANT NOTIFICATION

International application No.
PCT/DK00/00121International filing date (day/month/year)
17 March 2000 (17.03.00)

1. The following indications appeared on record concerning:

 the applicant the inventor the agent the common representative

Name and Address

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DK

State of Residence

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Facsimile No.

Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

 the person the name the address the nationality the residence

Name and Address

LID SYSTEMS A/S, Metropak as
Rundageren 4
DK-2640 Hedehusene
Denmark

State of Nationality

DK

State of Residence

DK

Telephone No.

Facsimile No.

Teleprinter No.

3. Further observations, if necessary:

The applicant identified in box 1 has assigned all his rights to the company identified in
box 2 for all designated states except the United States of America

4. A copy of this notification has been sent to:

 the receiving Office the designated Offices concerned the International Searching Authority the elected Offices concerned the International Preliminary Examining Authority other:The International Bureau of WIPO
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1211 Geneva 20, Switzerland

Authorized officer

Catherine Massetti

Telephone No.: (41-22) 338.83.38

Facsimile No.: (41-22) 740.14.35

003664266

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P 1999 01378 WO	FOR FURTHER ACTION		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/DK00/00121	International filing date (day/month/year) 17.03.2000	Priority date (day/month/year) 18.03.1999	
International Patent Classification (IPC) or national classification and IPC? B65D 51/14, B65D 41/04			
Applicant LID SYSTEMS A/S, Metropak as et al			

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>4</u> sheets.</p> <p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application 	
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Date of submission of the demand 17.10.2000	Date of completion of this report 30.07.2001	
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88	Telex 17978 PATOREG-S	Authorized officer Lars Ekeberg/EE Telephone No. 08-782 25 00

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DK00/00121

I. Basis of the report

1. With regard to the elements of the international application:^{*}

- the international application as originally filed
- the description:
pages 1-10
pages _____, as originally filed
pages _____, filed with the demand
- the claims:
pages _____, as originally filed
pages _____, as amended (together with any statement) under article 19
pages 11-14, filed with the demand
pages _____, filed with the letter of _____
- the drawings:
pages 1-3
pages _____, as originally filed
pages _____, filed with the demand
- the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language _____ which is:

- the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
 the language of publication of the international application (under Rule 48.3(b)).
 the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
 filed together with the international application in computer readable form.
 furnished subsequently to this Authority in written form.
 furnished subsequently to this Authority in computer readable form.
 The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
 The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages _____
 the claims, Nos. _____
 the drawings, sheet/fig _____

5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2 (c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under Item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DK00/00121

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>2-11, 13-15, 17</u>	YES
	Claims	<u>1, 12, 16, 18</u>	
Inventive step (IS)	Claims	<u>13-15</u>	YES
	Claims	<u>2-11, 17</u>	
Industrial applicability (IA)	Claims	<u>1-18</u>	YES
	Claims		

2. Citations and explanations (Rule 70.7)

This report is based on amended claims filed with the demand. The response to the written opinion of 09.05.2001 has not lead to any revaluations.

The invention according to amended claims 1-18 relates to a lid (claims 1-17) and a method (claim 18) for opening said lid. The lid, which is intended for jars, consists of an outer part, with a top part and a cylindrical collar, and an inner part. The invention is characterised in that the inner part consists of several layers, where the materials have been selected such that a higher friction coefficient is achieved between the inner lid and the container than between the inner and outer lid.

The part that characterised the initial claim 1 has been removed and placed in the dependent claim 16. In its place a totally different characteristic has been inserted. The only claims that have been fully searched are thereby claim 16 and claim 18, which correspond to initial claims 4 and 19, respectively. If the search had been based on present claim 1 with its wider and above all different scope a broader and different technical field would have been searched. This could of course have made a difference for the result of the search.

The following documents are, among others, cited in the International Search Report:

- D1: US 4,473,163 A
- D2: GB 2 122 178 A
- D3: EP 0 411 385 A2

Of these documents D1 and D2 are considered to be of particular relevance, while D3 only is considered to represent the general state of prior art.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DK00/00121

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: V

Claim 1

A lid is known from D2. It consists of an outer part, with a top part and a cylindrical collar, and an inner part. In this construction, the materials of the inner part have been selected in such a manner that a low friction coefficient is achieved between the inner lid and the container, see page 2, lines 47-53. Nothing is said about the friction between the inner and outer lid. Supposedly, the friction between the friction is higher between the lids than between the inner lid and the container. Thus, the invention according to claim 1 is novel with regard to D2.

In D1 (col. 4, lines 55-56), on the other hand, it is implied that the lids move relative each other before the inner lid lets go of the container. The invention of claim 1 is thereby implicitly known from D1. In figures 7-9 it is evident that the outer lid consists of a top part (40, 41, 42) and a cylindrical part (44, 50).

Claims 2-12

In claims 2 and 3 the invention is characterised in that the inner lid consists of more than one layer. From D2 it is known to use an inner lid with three different layers, the outer layers being protective ones. What is described in claims 2 and 3 is therefore considered most obvious for a person skilled in the art.

The choice of material, which is discussed in claims 4-11, is not considered to be of particular relevance for the invention. These claims are therefore considered to lack an inventive step.

The invention according to claim 12 is known from both D1 and D2. The formulation "said protrusion" is confusing as this is the first claim that mentions a protrusion.

Claim 13-15

In claim 13 the invention is characterised in that the inner lid has a hole for pressure equalising between the volume of the container and the volume between the outer and inner part of the lid. There is a space between the inner and outer part of the lid in both D1 and D2. However, there is no way of equalising the pressure between the two volumes in the lids in these lids.

.../...

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DK00/00121

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: V

Claim 13 and claim 14, which is dependent of claim 13, are therefore considered to describe a novel invention that involves an inventive step. Nowhere in D1 or D2 are there any suggestions that may lead a person skilled in the art to the solution mentioned above.

In claim 15 the invention is characterised in that the inner part is secured to the outer part with a rotary securing means. This is also novel and considered to involve an inventive step.

Claims 16-18

A lid consisting of an outer part (2) with a top part and a cylindrical collar, and a metallic inner part (3) is known from D1. The collar of the outer parts includes four projections (23a-d) that are directed inwards. When the lid is removed from the jar the projection 23b, which is the first projection to meet the inner cap, exerts a force on the edge of said cap and lifts it out of contact of the upper part of the jar at one point. The aim of this construction is, as in the present application, to remove the vacuum at one point before the whole cap is removed. Hence, the lid of claim 16 and the method for opening the lid, described in claim 18, are not novel.

The characteristic of claim 17 is obvious to every person skilled in the art.

Conclusion

In view of the arguments stated above, the invention according to claim 1, 12, 16 and 18 is not novel. The invention according to claims 1- 11 and 17 is considered to lack an inventive step. The invention according to claims 13-15 fulfills both these criteria as well as the criteria of industrial applicability.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/DK 00/00121

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B65D 51/14, B65D 41/04
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4473163 A (EDUARD GEIGER), 25 Sept 1984 (25.09.84), column 3, line 37 - column 4, line 22; column 4, line 66 - column 5, line 2, figures 1, 7-9	1-5,9-19
A	--	6-8
X	GB 2122178 A (CONTINENTAL WHITE CAP INC. ET AL), 11 January 1984 (11.01.84)	1-5,9-19
A	--	6-8
A	EP 0411385 A2 (ABBOTT LABORATORIES CHAD-0377), 6 February 1991 (06.02.91), column 5, line 50 - line 55	1-19
	--	

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document but published on or after the international filing date	"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search	Date of mailing of the international search report
9 June 2000	17 -07- 2000
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. + 46 8 666 02 86	Authorized officer Maria Börlin/MP Telephone No. + 46 8 782 25 00

INTERNATIONAL SEARCH REPORTInternational application No.
DK0000121**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).:

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See extra sheet.

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
DK00/00121

The characterizing feature common to all the claims 1-19 is the presence of a projection which will, during removal of the lid, exert an upwardly directed pressure against the edge of the inner lid of a lid for closing containers. Since the lid claimed in claim 1 and the method claimed in claim 19 are not novel in view of US 4473163 A, this feature does not form a single general inventive concept. Consequently, non-unity à posteriori arises. Claims 2-18 have no technical relationship in over the prior art, thus leaving seven independent inventions:

- I: Claim 2 relates to the diameter of the inner lid.
- II: Claim 3 relates to the inner lid being a multilayered sheet having great friction with the outer lid.
- III: Claim 4 relates to the inner lid being a multilayered sheet having low friction with the outer lid.
- IV: Claim 5 relates to an annular ring of the outer lid.
- V: Claim 6 relates to a hole in the inner lid.
- VI: Claim 8 relates to a rotatable securing means between the inner and the outer lid.
- VII: Claim 9 relates to choice of materials.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/DK 00/00121

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
US 4473163 A	25/09/84	CH 657589 A,B EP 0080142 A		15/09/86 01/06/83
GB 2122178 A	11/01/84	AU 1544683 A DK 260283 A EP 0096582 A NO 832054 A		15/12/83 08/12/83 21/12/83 08/12/83
EP 0411385 A2	06/02/91	CA 2022341 A DE 69008961 D,T ES 2056311 T JP 3148453 A US 4991731 A		04/02/91 03/11/94 01/10/94 25/06/91 12/02/91